

**The Costs and Benefits of Regulatory Intervention in Internet Disputes:
Lessons from Broadcast Signal
Retransmission Consent Negotiations**

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I. Introduction

In light of constant technological innovation, but infrequent legislative updates,¹ the Federal Communications Commission (“FCC”) faces a regulatory quandary. Should the Commission act on frequent requests that it apply existing regulations, or craft new ones to resolve real or anticipated interconnection disputes between and among Internet carriers and content providers?² Alternatively, should it refrain from expanding its regulatory wingspan unless and until it receives explicit statutory authority? The answer to this question substantially affects the telecommunications and information marketplace thus triggering vigorous debate among stakeholders.

¹ The most recent revision of the primary telecommunications law in the United States took place in 1996. *See* Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (Feb. 8, 1996).

² *See, e.g.*, Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications, Memorandum Opinion and Order, 23 F.C.C.R. 13,028 (2008), *vacated*, Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010) (FCC deemed to have exceeded its statutory authority when responding to a complaint and imposing network neutrality rules).

The ongoing question whether the FCC has a legislative mandate and compelling need to regulate the terms and conditions for an open Internet exemplifies the FCC's dilemma.³

Advocates for and against network neutrality⁴ frequently use hyperbole to make their case, but

³ See, e.g., Ivar A. Hartmann, *A Right to Free Internet? On Internet Access and Social Rights*, 13 J. HIGH TECH. L. 297 (2013); Lixian Hantover, *Creating Sustainable Regulation of the Open Internet*, 20 UCLA ENT. L. Rev. 107 (Winter, 2013); Amanda Leese, *Net Transparency: Post-Comcast FCC Authority to Enforce Disclosure Requirements Critical to "Preserving The Open Internet,"* 11 NW. J. TECH. & INTELL. PROP. 81 (Jan. 2013); Daniel A. Lyons, *Net Neutrality and Nondiscrimination Norms in Telecommunications*, 54 ARIZ. L. REV. 1029 (Winter, 2012); Adam Candeub and Daniel McCartney, *Law and the Open Internet*, 64 FED. COMM. L.J. 493 (May, 2012); Rob Frieden, *Rationales For and Against Regulatory Involvement in Resolving Internet Interconnection Disputes*, 14 YALE J. L. & TECH. 266 (2012); Dirk Grunwald, *The Internet Ecosystem: The Potential for Discrimination*, 63 FED. COMM. L.J. 411 (March, 2011); Rob Frieden, *Assessing the Merits of Network Neutrality Obligations at Low, Medium and High Network Layers*, 115 PA. ST. L. REV., No. 1, 49-82 (Summer, 2010); Marvin Ammori, *Beyond Content Neutrality: Understanding Content-Based Promotion of Democratic Speech*, 61 FED. COMM. L.J. 273 (March 2009); Sascha D. Meinrath and Victor W. Pickard, *Transcending Net Neutrality: Ten Steps Toward an Open Internet*, 12 J. INTERNET L., No. 6, 1 (Dec. 2008); Tim Wu and Christopher S. Yoo, *Keeping the Internet Neutral? Tim Wu and Christopher Yoo Debate*, 59 FED. COMM. L.J. 575 (June 2007); Tim Wu, *Network Neutrality, Broadband Discrimination*, 2 J. Telecomm. And High Tech L. 141 (2005); Christopher S. Yoo, *Would Mandating Broadband Network Neutrality Help or Hurt Competition? A Comment on the End-to-End Debate*, 3 J. TELECOMM. AND HIGH TECH L. 23 (2004).

⁴ Network neutrality refers to government mandated nondiscrimination, transparency and other requirements on ISPs designed to foster a level competitive playing field among content providers and to establish consumer safeguards so that Internet users have unrestricted access limited only by legitimate concerns such as ISP network management and national security. See *Preserving the Open Internet*, Report and Order, GN Docket No. 09-191, WC Docket No. 07-52, 25 F.C.C.R. 17905, n. 48 (2010) [hereinafter cited as 2010 Open Internet Order] *aff'd in part, vacated and remanded in part sub nom. Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014), *on remand*, *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, Notice of Proposed Rulemaking, 2014 WL 2001752 (rel. May 15, 2014) [hereinafter cited as 2014 Open Internet NPRM].

For background on network neutrality initiatives outside the United States, see, e.g., European Parliament, *Report on the proposal for a regulation of the European Parliament and of the Council laying down measures concerning the European single market for electronic communications and to achieve a Connected Continent, and amending Directives 2002/20/EC, 2002/21/EC and 2002/22/EC, and Regulations (EC) No 1211/2009 and (EU) No 531/2012* (April 3, 2014); available at: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+PV+20140403+ITEM-007-05+DOC+XML+V0//EN>; European Commission,

the FCC's decision whether to act does have profound consequences. Refraining from establishing rules may facilitate anticompetitive practices that harm consumers and the national economy, but acting on the basis of unproven harms can impose costs and generate disincentives for investment in network upgrades.

FCC managers historically may have a bias in favor of intervention, because doing so expands the scope and reach of the Commission's regulatory wingspan which typically justifies more funding. On the other hand FCC management needs to consider the impact of any regulatory initiative on the agency's record of convincing appellate courts that statutory authority supports action, or alternatively that the Commission acted reasonably in light of ambiguous statutory direction on whether and how to act.

The matter of network neutrality poses particularly vexing challenges, because of a combination of factors including a broad gap in statutory interpretation by interested parties, agitated consumers, complex and conflicting framing of the issues and the nearly universal view that great harm will beset various stakeholders if the Commission intervenes, or fails to do so. Advocates for regulatory action have not produced a large and compelling empirical record of harm,⁵ instead relying on forecasts that biased networks will reduce the future value,

Digital Agenda for Europe, Open Internet; available at: <https://ec.europa.eu/digital-agenda/en/eu-actions>; Catherine Jasseranda, *Critical Views on the French Approach to "Net Neutrality,"* 16 J. INTERNET L., No. 9, 18 (March, 2013); European Parliament, Directorate General for Internal Policies, Policy Department, *Network Neutrality: Challenges and Responses in the E.U. and the U.S.*, IP/A/IMCO/ST/2011-02 (May, 2011); available at: <http://www.europarl.europa.eu/document/activities/cont/201108/20110825ATT25266/20110825ATT25266EN.pdf>; Toshiya Jitsuzumi, *Discussion on network neutrality: Japan's perspective*, 3 COMMS & CONVERGENCE REV., No. 1, 71-89 (2011).

⁵ A frequently cited example of harmful operation of a biased and discriminatory network is Madison River Communications, LLC, 20 F.C.C.R. 4295, 4297 (2005) (small independent telephone company agreed to a \$15,000 monetary forfeiture and consent decree agreeing not to

accessibility and utility of the Internet. Opponents argue that regulatory intervention to solve unproven harms impose costs including a net reduction in innovation and investment in Internet infrastructure and applications.

This paper will consider what roles, if any, the FCC may lawfully assume to ensure timely and fair interconnection and compensation agreements between Internet carriers and sources of content. The paper will examine the FCC's limited role in broadcaster-multichannel video programming distributors ("MVPDs") retransmission consent negotiations with an eye toward assessing the applicability of this model. The FCC has stated that it lacks jurisdiction to prescribe specific financial terms for broadcasters and MVPDs, mandate binding arbitration,⁶ or interim carriage⁷ when the parties cannot reach closure and consumers no longer have access to "must see" video content such as professional football games and other live programming.

block Digital Subscriber Link customers' access to competitor's Voice over the Internet Protocol telephone service).

⁶ "We do not believe that the Commission has authority to adopt either interim carriage mechanisms or mandatory binding dispute resolution procedures applicable to retransmission consent negotiations." Amendment of the Commission's Rules Related to Retransmission Consent, MB Docket No. 10-71, Notice of Proposed Rulemaking, 26 F.C.C.R. 2718, 2727-28 (2011). "[W]e believe that mandatory binding dispute resolution procedures would be inconsistent with both Section 325 of the Act, in which Congress opted for retransmission consent negotiations to be handled by private parties subject to certain requirements, and with the Administrative Dispute Resolution Act ("ADRA"), which authorizes an agency to use arbitration 'whenever all parties consent.'" *Id.* at 2728-29 (citations omitted).

⁷ "[E]xamination of the Act and its legislative history has convinced us that the Commission lacks authority to order carriage in the absence of a broadcaster's consent due to a retransmission consent dispute. Rather, Section 325(b) of the Act expressly prohibits the retransmission of a broadcast signal without the broadcaster's consent. Furthermore, consistent with the statutory language, the legislative history of Section 325(b) states that the retransmission consent provisions were not intended 'to dictate the outcome of the ensuing marketplace negotiations' and that broadcasters would retain the 'right to control retransmission and to be compensated for others' use of their signals.' We thus interpret Section 325(b) to prevent the Commission from ordering carriage over the objection of the broadcaster, even upon a finding of a violation of the good faith negotiation requirement." *Id.* 2728 (citations omitted).

However, the Commission has interpreted its statutory authority to ensure “good faith” negotiations⁸ as allowing it to constrain broadcaster negotiating leverage by prohibiting multiple operators, having the largest market share, from joining in collective negotiations with cable operators.⁹ Additionally the Commission proposes to eliminate two major constraints on MVPD content access¹⁰ in light of increased competition in the video programming marketplace: the duty to “black out” delivery of duplicative broadcast network and syndicated programming.

The paper recommends that the FCC not define, or interpret what constitutes commercially reasonable interconnection and compensation agreements for video carriage by MVPDs, or ISPs. It suggests that the FCC apply elements in the retransmission consent model that allow the Commission to establish structural requirements in negotiations without directly

⁸ Section 325 of the Communications Act obligates broadcast stations and MVPDs to negotiate retransmission consent in good faith. 47 U.S.C. §325(b)(3)(C). For an analysis of the good faith negotiation requirement along with recommendations for better outcomes for consumers, see Meg Burton, *Reforming Retransmission Consent*, 64 FED. COMM. L.J. 617 (May, 2014); Darrel John Pae, *Toward a Fairer, Subscriber-Empowered Multichannel Television Regime: Injecting Substance into the Good-Faith Requirements on Retransmission Consent Negotiations*, 66 FED. COMM. L.J. 139 (Dec., 2013); Sherli Yeroushalmi, *With Court’s Silence, FCC’s ‘Good Faith’ Standard Has Left TV Programmers and Distributors at Impasse*, Bloomberg BNA, BNA INSIGHTS (Oct. 23, 2013).

⁹ “[W]e revise our ‘retransmission consent’ rules, which govern carriage negotiations between broadcast television stations and multichannel video programming distributors (“MVPDs”), to provide that joint negotiation by stations that are ranked among the top four stations in a market as measured by audience share (‘Top Four’ stations) and are not commonly owned constitutes a violation of the statutory duty to negotiate retransmission consent in good faith.” Amendment of the Commission’s Rules Relating to Retransmission Consent, MB Docket No. 10-71, Report and Order and Further Notice of Proposed Rulemaking, 29 F.C.C.R. 3351, ¶1 (2014) [hereinafter cited as 2014 Revised Retransmission Consent Rules].

¹⁰ “We tentatively conclude that the Commission has authority to eliminate exclusivity rules for cable operators, satellite carriers, and open video systems. . . . Congress did not explicitly mandate that the Commission adopt the net non-duplication and syndicated exclusivity rules for cable. Rather, the Commission adopted these rules to provide a mechanism for broadcasters to enforce their exclusive contractual rights in network and syndicated programming by preventing cable systems from importing distant network station programming.” 2014 Revised Retransmission Consent Rules at ¶56.

affecting the substantive terms of ISP agreements. Toward that end, the FCC should use simple reporting requirements to assess the timeliness of negotiations and also provide a forum to identify and disclose instances where stalling and other tactics possibly evidence bad faith. The paper concludes that limited structural requirements constitute both lawful and effective safeguards that do not intrude on the commercial process used by participants in the Internet ecosystem.

II. Technology, Design and Market Imperatives Favor an Open Internet

References to the Internet as a network of networks,¹¹ or cloud¹² recognize the numerous interconnections and compensation arrangements necessary to achieve a complete routing of traffic from content source to end user.¹³ Exempt from public utility, common carrier regulatory

¹¹ “The Internet is a global network of networks that has been the platform for revolutionary innovation. The role of the Internet in enabling innovation is not accidental; rather it flows from the Internet’s architecture. The key innovation-enabling feature of Internet architecture is comprised of layers, narrowly understood as defined by code or broadly understood as functional components of a communications system.” Lawrence B. Solum and Minn Chung, *The Layers Principle: Internet Architecture and the Law*, 79 NOTRE DAME L. REV. 815, 816 (April, 2004). See also, Eli M. Noam, *Beyond Liberalization: From the Network of Networks to the System of Systems*, 18 TELECOMM. POL’Y 286 (1994).

¹² The Internet cloud refers to the vast array of interconnected networks that make up the Internet and provide users with seamless connectivity to these networks and the content available via these networks. “The increasing functionality of the Internet is decreasing the role of the personal computer. This shift is being led by the growth of “cloud computing”--the ability to run applications and store data on a service provider’s computers over the Internet, rather than on a person’s desktop computer.” William Jeremy Robison, *Free at What Cost?: Cloud Computing Privacy Under The Stored Communications Act*, 98 GEO. L.J. 1195, 1199 (April, 2010).

¹³ “The Internet developed initially as an academic curiosity, based on a commitment to the ‘end-to-end principle.’ This principle requires that all Internet traffic, whether an email, a Voice over Internet Protocol (VoIP) ‘call’ or a video stream, be treated equally and managed through ‘best efforts’ connections. In such a network, data packets pass from one router to another without the prioritization of any particular packets. In practice, this means that Internet traffic reaches its destination at varying times, depending on the traffic levels of the relevant Internet communications links.” Philip J. Weiser, *The Next Frontier for Network Neutrality*, 60 ADMIN. L. REV. 273, 277-78 (2008).

requirements,¹⁴ ISPs regularly engage in commercial negotiations to reach voluntary interconnection agreements having varied terms, conditions and compensation rates. As the Internet has evolved, these arrangements have diversified from a general baseline dichotomy of using barter (peering), or a transfer payments (transiting).¹⁵ In particular, the downstream delivery of bandwidth intensive video content, such as Internet Protocol Television (“IPTV”),¹⁶

¹⁴ The Communications Act of 1934, as amended, defines telecommunications service as “the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.” 47 U.S.C. § 153(46) (2013). Telecommunications is defined as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.” *Id.* 47 U.S.C. § 153(43). Title II of the Communications Act, as amended, 47 U.S.C. §201 *et seq.*, apply nondiscrimination and other common carrier requirements on telecommunications service providers. On the other hand, information service is defined as “the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.” 47 U.S.C. § 153(20). These services qualify for a largely unregulated status.

¹⁵ See Christopher S. Yoo, *Innovations in the Internet’s Architecture that Challenge the Status Quo*, 8 J. TELECOMM. & HIGH TECH. L. 79 (Winter, 2010)(outlining new ISP interconnection variations of peering and transiting).

¹⁶ IPTV offers consumers with broadband connections options to download video files or view (streaming) video content on an immediate “real time” basis. Sky Angel U.S., LLC, Emergency Petition for Temporary Standstill, DA 10-679, 25 F.C.C.R. 3879 (2010). Some of the available content duplicates what cable television subscribers receive therein triggering disputes over whether cable operators can secure exclusive distribution agreements and prevent an IPTV service provider from distributing the same content. “Sky Angel has been providing its subscribers with certain Discovery networks for approximately two and a half years, including the Discovery Channel, Animal Planet, Discovery Kids Channel, Planet Green, and the Military Channel. Sky Angel submits that these channels are a significant part of its service offering.” *Id.* at 3879-80. For background on IPTV, see Rob Frieden, *The Impact of Next Generation Television on Consumers and the First Amendment*, 24 FORDHAM INTELL. PROP., MEDIA & ENT. L.J. No. 1, 61-95 (2014); In-Sung Yoo, *The Regulatory Classification of Internet Protocol Television: How the Federal Communications Commission Should Abstain From Cable Service Regulation and Promote Broadband Deployment*, 18 COMMLAW CONSPECTUS 199 (2009).

has triggered new arrangements that accommodate the interests of content providers and distributors in speedy, high quality delivery of traffic and ISPs' interest in profiting from their additional investment in switching and routing capacity needed to handle such a massive increase in traffic volume. However, content providers and downstream ISPs increasingly disagree on who should pay and the rate of compensation resulting in more disputes and occasional disconnections.

The proliferation of “mission critical” bit streams containing “must see” video has raised the stakes in negotiations among ISPs and between ISPs and content sources. The combination of consumer intolerance for service degradation and the need to negotiate with specific ISPs providing the “last mile” delivery of content to end users (“retail ISPs”) may place upstream ISPs and content ventures at a negotiation disadvantage. MVPDs appear to have a similar handicap in light of regulatory requirements that foreclose the option of finding a replacement source of specific content, e.g., substituting a distant broadcast signal containing the same network, or syndicated programming as offered by a local station that has rejected MVPD compensation proposals.

Both retail ISPs and broadcasters may perceive an advantage in stalling, perhaps with an eye toward enlisting broadband and MVPD subscribers as their advocates. On the other hand, these ventures may face the risk of consumer push back and calls for regulatory intervention if they overplay their hand. Regardless of underlying strategies, consumers have become increasingly inconvenienced as negotiations become more protracted and expensive in both the broadcast-MVPD arena ¹⁷ and the Internet. ¹⁸ Consumers pay higher monthly subscriptions when

¹⁷ “The reality is that the number of retransmission disputes is growing. This trend is likely to continue with increased competition among MVPDs and mounting involvement by networks in local affiliate retransmission negotiations.” Gregory J. Vogt, *Does Retransmission Consent*

MVPDs have to pay more for content and when upstream ISPs and content providers have to pay more for delivery services.

Several high profile interconnection and compensation disputes have involved major broadcast networks, such as CBS, and cable television operators, such as Times Warner,¹⁹ as well as leading ISPs, such as Comcast and Level 3,²⁰ and major sources of content, such as

Need Fixing? (or Do Consumers Need Help So They Can Watch the Super Bowl, World Series, and Academy Awards?), 22 COMMLAW CONSPECTUS, 108, 111 (2014).

¹⁸ For example, Netflix agreed to a paid peering agreement that one can assume resulted in higher payments to Comcast in light of substantial increases in downstream delivery by Comcast. See Netflix Media Center, *Comcast and Netflix Team Up to Provide Customers Excellent User Experience* (Feb. 23, 2014); available at: <https://pr.netflix.com/WebClient/getNewsSummary.do?newsId=992>. “Paid peering, for example, resembles normal peering in almost every respect, except that one network pays the other network even when the exchange of traffic is roughly the same. These more sophisticated agreements reflect the fact that while the traffic exchange may be equal, the cost of maintaining the networks’ respective infrastructures may be unequal. ISPs serving a smaller number of large internet content websites (known as ‘content networks’) have lower costs in maintaining their infrastructure than ISPs serving home users (‘eyeball networks’), since residential neighborhoods require more equipment investment (such as wiring) and maintenance than commercial areas. These interconnection agreements create the economic incentives for ISPs to route internet traffic along the lowest-cost paths, which can sometimes have a discriminatory effect on certain types of content, applications, and services.” Alexander Reicher, *Redefining Net Neutrality After Comcast v. FCC*, 26 BERKELEY TECH. L.J. 733, 752 (2011).

¹⁹ “CBS and Time Warner Cable ended their protracted contract dispute Monday evening with CBS winning not only a significant financial increase for its programming, but also its stake in the digital future. . . . The outcome underscored the leverage that the owners of important television content, especially sports like N.F.L. football, retain over distributors like cable systems.” Bill Carter, *CBS Returns, Triumphant, to Cable Box*, THE NEW YORK TIMES (Sep. 2, 2013); available at <http://www.nytimes.com/2013/09/03/business/media/cbs-and-time-warner-cable-end-contract-dispute.html>.

²⁰ Cf. Level 3, Press Release, *Level 3 Communications Issues Statement Concerning Comcast’s Actions* (Nov. 29, 2010); available at: <http://www.level3.com/About-Us/Newsroom/Press-Release-Archive/2010/2010-11-29-level3-statement-comcast.aspx> with Comcast Corp., *10 Facts About Peering, Comcast and Level 3*, COMCAST VOICES BLOG SITE (Nov. 30, 2010); available at: <http://blog.comcast.com/2010/11/10-facts-about-peering-comcast-and-level-3.html> and Joe Waz, *Comcast Comments on Level 3*, COMCAST VOICES

Netflix.²¹ Protracted disputes, well covered by the news media, have made the issue of regulatory intervention more salient to many consumers. To the FCC's credit, it has refrained from over-reacting, but the issues of more aggressive involvement in retransmission consent and ISP interconnection negotiations have the potential to become a part of the broader debate about what constitutes baseline requirements for an "open" video marketplace and Internet. For example, the FCC has proposed that ISPs bear the burden of proving as "commercially reasonable" deviations from the standard of nondiscriminatory, "best efforts" traffic routing when the Commission considers whether to intervene in ISP interconnection negotiations.²²

BLOG SITE (Nov. 29, 2010); available at: <http://blog.comcast.com/2010/11/comcast-comments-on-level-3.html>.

²¹ See Drew Fitzgerald and Shalini Ramachandran, *Netflix-Traffic Feud Leads to Video Slowdown*, THE WALL STREET JOURNAL (Feb. 18, 2014); available at: <http://online.wsj.com/news/articles/SB10001424052702304899704579391223249896550>; Shalini Ramachandran, *Netflix to Pay Comcast for Smoother Streaming*, THE WALL STREET JOURNAL (Feb. 23, 2014); available at: <http://online.wsj.com/news/articles/SB10001424052702304834704579401071892041790>; Daniel L. Brenner and Winston Maxwell, *The Network Neutrality and the Netflix Dispute: Upcoming Challenges for Content Providers in Europe and the United States*, 23 INTEL. PROP. & TECH. L.J. 3 (March 2011); Rob Frieden, *Rationales For and Against Regulatory Involvement in Resolving Internet Interconnection Disputes*, 14 YALE J. L. & TECH. 266 (2012).

²² "[W]here [ISP interconnection] conduct would otherwise be permissible under the no-blocking rule, [barring the blockage of lawful content] we propose to create a separate screen that requires broadband providers to adhere to an enforceable legal standard of commercially reasonable practices, asking how harm can best be identified and prohibited and whether certain practices, like paid prioritization, should be barred altogether." 2014 Open Internet NPRM at ¶10. "While the D.C. Circuit vacated the Commission's rule prohibiting 'unreasonable discrimination' by fixed broadband providers on the theory that it 'so limited broadband providers' control over edge providers' transmissions that [it] constitute[d] common carriage *per se*,' the court underscored the validity of the 'commercially reasonable' legal standard the Commission used in the data roaming context and the court upheld in *Cellco [Partnership v. FCC]*, 700 F.3d 534, 541 (D.C. Cir. 2012)." 2014 Open Internet NPRM at ¶110. "Our proposed approach is both more focused and more flexible than the vacated 2010 non-discrimination rule. It would prohibit as commercially unreasonable those broadband providers' practices that, based on the totality of the circumstances, threaten to harm Internet openness and all that it protects. At

A. Arguments For and Against Biased Networks

One can rarely find consensus on many aspects of the Internet other than the near universal agreement that it has become a major medium for access to information, communications and entertainment (“ICE”). Different and somewhat conflicting analogies provide a baseline frame of reference. To some the Internet operates as an amorphous cloud that receives, stores and delivers content.²³ Other analogies depict the Internet as a series of tubes,²⁴ a network of networks,²⁵ a broadband communications supply chain,²⁶ a hierarchy of operating standards and protocols²⁷ and a platform or interface for accessing content.²⁸

the same time, it could permit broadband providers to serve customers and carry traffic on an individually negotiated basis, ‘without having to hold themselves out to serve all comers indiscriminately on the same or standardized terms,’ so long as such conduct is commercially reasonable.” *Id.* at ¶116.

²³ See *supra*, n. 12.

²⁴ See Andrew Blum, *Tubes: A Journey to the Center of the Internet* (2012).

²⁵ See Eli M. Noam, *Interconnecting the Network of Networks* (2001).

²⁶ See Arturo Muent-Kunigami, *Digital Inclusion: Beyond Access to Broadband*, Figure 1, Supply Value Chain, The World Bank, IC4D Blog (Feb. 22, 2011); available at: <http://blogs.worldbank.org/ic4d/digital-inclusion-beyond-access-to-broadband>.

²⁷ “In the Open System Interconnection (‘OSI’) model, layered network architecture for packet networks typically consists of seven layers: physical, data link, network, transport, session, presentation and application. The model calls for the independent operation of the layers, and supports the interaction of various applications and equipment that is designed to address separately each layer in a product offering. In the Transport Control Protocol (‘TCP’)-IP model, only four levels are used: link (combines OSI physical and data link levels), network, transport and application (combines OSI session, presentation and application levels). The functions supported at each layer are as follows: *physical*—represents electrical signaling, modulation, etc.; *data link*—moves packets (also called ‘datagrams’) between hosts based on a protocol such as Ethernet, Asynchronous Transfer Mode, frame relay; *network*—defines how data is routed between hosts over one or several networks, often based on IP; *transport*—establishes the connection between two hosts, creating a ‘virtual’ network, often based on TCP or Universal Datagram Protocol; *session*—controls the setup and termination of communications sessions; *presentation*—defines the format of the data exchanged (e.g., text, graphic); *application*—defines how applications communicate with each other over the network (e.g., e-mail) using various protocols.”

The lack of consensus also extends to whether and how the Internet should operate. Network neutrality advocates support a public utility model where ISPs provide regulated conduits. Opponents support market-driven options where ISPs can discriminate on the basis of price, quality of service and traffic routing priority. At its inception, the basic topology and operating parameters of the Internet favored openness, modularity and a layered hierarchy of functions.²⁹ The Internet architecture favors widespread diffusion of content and intelligence rather than concentration at core locations. The phrase dumb pipe may understate the intelligence of Internet networks, but the reference emphasizes a design favoring intelligence at the edges of networks, on users' premises, rather than within the transmission links themselves.³⁰

Early emphasis on intelligence at the edge evidenced an appreciation that the Internet could become ubiquitous and essential only if consumers could access widely dispersed content using seamlessly interconnecting networks jointly participating in the routing of traffic.³¹

Communications Assistance for Law Enforcement Act and Broadband Access and Services, 19 F.C.C.R. 15676 n.181 (2004). *See also*, Christopher S. Yoo, *Protocol Layering and Internet Policy*, 161 U. PA. L. REV. 1707 (May, 2013).

²⁸ *See* Richard S. Whitt, *A Deference to Protocol: Fashioning A Three-Dimensional Public Policy Framework for the Internet Age*, 31 CARDOZO ARTS & ENT. L.J. 689 (2013); Richard S. Whitt, *Evolving Broadband Policy: Taking Adaptive Stances to Foster Optimal Internet Platforms*, 17 COMMLAW CONSPPECTUS 417 (2009).

²⁹ Christopher S. Yoo, *Protocol Layering and Internet Policy*, 161 U. PENN L. REV. 1707 (May, 2013)(explaining how a layered and structured design architecture has costs including potential losses in innovation and flexibility).

³⁰ "Internet intelligence resides at the ends of the network. There, a user's device or server does the heavy lifting and determines if the received data is intended for it.11 This leads to the phenomenon of the so-called 'dumb' network." Frederick W. Pfistera, *Net Neutrality: An International Policy for the United States*, 9 SAN DIEGO INT'L L.J. 167, 171 (Fall. 2007). *See also*, J.H. Saltzer, D.P. Reed and D.D. Clark, *End-to-End Arguments in System Design*, 2 ACM TRANSACTIONS IN COMPUTER SYSTEMS, 277, 277-78 (1984).

³¹ "Like the railroad system or the electric power grid, the Internet is a collection of independent networks that coordinate their actions, forming what appears to be a seamless

Similarly the protocols designed for the Internet favor connectivity and openness. The network of networks depiction of the Internet underscores network compatibility regardless of geographical location of content, who operates the networks used to route traffic and the manufacturer and age of network equipment used. Concepts like “end-to-end” connectivity³² support best efforts routing throughout the entire Internet cloud.

The decision by governments to underwrite development of the Internet through grants, subsidies and early use helped support the concept of neutrality and deflect, or ignore important issues about cost recovery. With taxpayers bearing the financial cost of network deployment, carriers could concentrate on expanding the Internet’s reach, accessibility and capacity without paying much attention to the cost of upgrades and what carriers and users triggered the need for upgrades in light of growing demand for service. At its inception the Internet operated as a shared and widely available medium with carriers keen on finding new partners in the shared mission of expanding geographical reach.³³

collective. This structure allows all users, application creators, and content providers to leverage the full power of the global inter-network. The Internet fosters innovation by eliminating transaction costs, enabling new services to Today, however, centrifugal forces of dissolution are ascendant. The growing potential for balkanization poses grave threats to the Internet as an engine of innovation, economic growth, and creative expression.” Kevin Werbach, *The Centripetal Network: How the Internet Holds Itself Together, and the Forces Tearing It Apart*, 42 U.C. DAVIS L. REV. 343, 348 (Dec. 2008).

³² See David D. Clark and Marjory S. Blumenthal, *The End-To-End Argument and Application Design: The Role of Trust*, 63 FED. COMM. L.J. 357, 364-65 (March 2011); Mark A. Lemley and Lawrence Lessig, *The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era*, 48 UCLA L. REV. 925 (2001).

³³ For background on the history of Internet development, see Barry M. Leiner et al., *A Brief History of the Internet*, Internet Society (2003); available at <http://www.isoc.org/internet/history/brief.shtml>; see also, Rob Frieden, *Rationales for and Against Regulatory Involvement in Resolving Internet Interconnection Disputes*, 14 YALE L. J. & TECH. 266, 276 (2012)(identifying and describing four phases in Internet development).

Carriers operating in the first generation Internet used a barter arrangement, often lacking comprehensive terms and conditions, when agreeing to interconnect their separate networks. This process of peering³⁴ operated under the assumption that carriers' traffic volumes were nearly equal, or that imbalances did not matter in light of government subsidies. Put another way, the first ISPs assumed traffic metering was too costly, or unnecessary.

A heritage favoring efforts to promote seamless network interconnections lives on, despite changes in the Internet ecosystem most notably the replacement of government subsidies by a largely commercial marketplace. Absent government subsidies, ISPs need to recoup sizeable and frequent investments in next generation network equipment from subscribers and other carriers. As the type and number of ISPs increased, new financial compensation arrangements evolved, particularly ones to address interconnection between carriers having no likelihood of equal traffic volumes. Transiting refers to arrangements where an ISP, lacking parity of traffic volume, capacity, subscribers, attractive content sources, switching resources, or geographical reach agrees to compensate another ISP for accepting traffic and routing it onward to other ISPs, or to the intended final destination.

As the Internet has privatized, commercialized and diversified, ISPs have had to balance the primary goal of promoting greater accessibility and reach with perhaps more pedestrian, but essential financial considerations. Absent a third party underwriter, ISPs must rely on their subscribers and other ISPs for adequate compensation to recoup and earn a return on investments. Many ISPs, particularly the largest ones providing backbone transcontinental and transoceanic routes, faced the unenviable task of renegotiating peering agreements and replacing

³⁴ For background on the peering process, see Geoff Huston, APNIC, *Internet peering and settlements*; available at: http://www.apnic.net/community/ecosystem/i*orgs/number-misuse/internet-peering-and-settlements; Dr. Peering International, web site; available at: <http://drpeering.net/index.php>.

a “bill and keep,” zero transfer payment barter system with one, such as transiting, that required payments.³⁵

It should come as no surprise that fully privatized ISPs, operating in a largely unregulated commercial environment, seek new revenue and profit centers. These carriers revisited the policy favoring “best efforts” routing and identified new avenues for diversification based on price, quality of service discrimination and routing priority.³⁶ Just as major ISPs saw the need to stop offering their switching and routing services to all carriers, regardless of their ability to offer an equivalent and reciprocal service, these carriers and others providing first and last mile broadband services to end users also considered new networking arrangements requiring payments.

One can consider these new arrangements as sensible and evidence of a maturing and diversifying Internet.³⁷ Not all forms of price and quality of service discrimination serve ulterior

³⁵ “As the Internet has become more commercial, the traditional roles of various Internet entities have become less clear, researchers said. The roles of access ISPs, transit or backbone ISPs, content providers and content delivery networks used to be fairly distinct Over the last few years, those distinctions have become more and more blurry, he said. ‘Everybody’s basically trying to play all of these roles all the time.’ This increases the likelihood of disputes

‘I don’t think settlement-free peering is going away,’ said a Tier 1 ISP executive. What’s changing is that new charging agreements are becoming available, he said. Paid peering is one of them, but there are others that fall between the extremes of free peering and paying for transit, he said.” *Paid Internet Peering on the Rise, Disputes Possible*, COMMUNICATIONS DAILY (July 1, 2013); available at: <http://www.cs.columbia.edu/~misra/news/CD070113.pdf>.

³⁶ Stacey Higginbotham, *Peering pressure: The secret battle to control the future of the internet*, GigaOM (June 19, 2013); available at: <http://gigaom.com/2013/06/19/peering-pressure-the-secret-battle-to-control-the-future-of-the-internet/>.

³⁷ For background on peering, transit and new interconnection arrangements, see Dennis Weller and Bill Woodcock, *Internet Traffic Exchange*, OECD Digital Economy Papers No. 207 (Jan. 29, 2013); available at: http://www.oecd-ilibrary.org/science-and-technology/internet-traffic-exchange_5k918gpt130q-en; Ana-Maria Kovacs, *Internet Peering and Transit* (April 4, 2012); available at: <http://www.techpolicyinstitute.org/files/amkinternetpeeringandtransit.pdf>.

motivates to favor corporate affiliates, or parties willing to pay a surcharge. Indeed the torrent of downstream traffic, represented by full motion video content, necessitate accommodations, because traffic for many carriers has become substantially asymmetrical: far more downstream than upstream traffic. For example, a new category of ISP, known as a Content Distribution Network (“CDN”),³⁸ has a business plan for targeting video content sources and distributors, e.g., Netflix, and providing them with massive downstream bandwidth they require to reach subscribers.³⁹

On the other hand, any form of network bias—no matter how sensible, desirable and commercially successful—runs counter to the still widely embraced concept that conduit neutrality should foreclose most, if not all types of discrimination.⁴⁰ Notwithstanding this general disposition, Internet subscribers most certainly do want efforts by ISPs to promote greater certainty that “mission critical” bits arrive without degradation, particularly if congested

³⁸ “In recent years, more complex arrangements have developed, as companies constantly seek to optimize performance along both financial and engineering dimensions. Some networks now pay for peering in order to guarantee performance on the terminating network. The rise of content delivery networks, which store content close to its destination using caching servers for improved performance, has also changed Internet interconnection dynamics. The environment is considerably more complex today than in the days of ‘Tier 1’ peering.” Kevin Werbach, *No Dialtone: The End of the Public Switched Telephone Network*, 66 FED. COMM. L.J. 203, 240 (April, 2014).

³⁹ “To avoid transit fees and to route content more quickly to its destination, some content providers choose instead to purchase access from private content-delivery networks such as Akamai or Limelight, which also typically charge customers based on volume.” Daniel A. Lyons, *Internet Policy's Next Frontier: Usage-Based Broadband Pricing*, 66 Fed. Comm. L.J. 1, 8 (Dec. 2013).

⁴⁰ See e.g., Susan Crawford, *Introducing the Comcast Tax*, BLOOMBERGVIEW (Feb. 24, 2014); available at: <http://www.bloombergtview.com/articles/2014-02-24/introducing-the-comcast-tax>; Tim Wu, *Comcast Versus the Open Internet*, THE NEW YORKER (Feb. 24, 2014); available at: <http://www.newyorker.com/online/blogs/elements/2014/02/comcast-versus-the-free-internet.html>.

network conditions exist. Netflix subscribers expect timely delivery of bandwidth intensive, video traffic and their pain threshold for degraded service starts as soon as the content freezes, or blurs. Similarly network neutrality advocates do not appear to have a problem with content sources and distributors installing proxy servers, or retaining the services of CDNs, such as Akamai, that use these devices to distribute content closer to end users.⁴¹ Such “better than best efforts” traffic routing reduces the number of routers traversed, the distance that traffic must travel to reach end users and the total elapsed delivery time (latency).

It appears that network neutrality advocates concentrate on the last mile delivery of traffic by retail ISPs perhaps because of the assumption that these carriers have the greatest incentive and ability to discriminate in ways that can harm consumers and competition. Advocates for network neutrality express concerns that without regulatory oversight, ISPs, providing the final leg of a complete end-to-end service, will generate artificial congestion with an eye toward forcing upstream ISPs and content sources to pay surcharges for traffic routing that previously triggered neither congestion, nor an additional duty to compensate the downstream carrier. Network neutrality proponents contend that absent regulatory oversight ISPs will engage in unreasonable price and quality of service discrimination to favor corporate affiliates and surcharge payers, a process they believe would handicap new ventures with limited finances and all ventures now vulnerable to surcharge payment demands to remedy artificial and

⁴¹ Content providers and distributors can opt to negotiate directly with retail ISPs for the right to install (“co-locate”) equipment on site, or alternatively secure the services of a company, such as Akamai, to negotiate, install and maintain the equipment. Netflix has sought the direct negotiation option with ISPs. Netflix, U.S. and Canada Blog, *Announcing the Netflix Open Connect Network* (June 4, 2012); available at: <http://blog.netflix.com/2012/06/announcing-netflix-open-connect-network.html>.

induced congestion that an ISP might create to discipline, or punish a specific ISP or content source.

B. Distinguishing Reasonable and Unreasonable Discrimination

Currently the FCC has classified all forms of Internet access as information services,⁴² not subject to Title II common carrier regulation.⁴³ Even if the FCC were to reclassify Internet access as a telecommunications service, subject to the nondiscrimination requirements contained in Title II,⁴⁴ the Commission would find it necessary to make ad hoc determinations of what

⁴² Information service is defined as “the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.” 47 U.S.C. § 153(20). These services qualify for a largely unregulated status.

⁴³ Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities, Declaratory Ruling and Notice of Proposed Rulemaking 17 F.C.C.R. 4798, 4821 (2002), *aff’d sub nom.* Nat’l Cable & Telecomm. Ass’n v. Brand X Internet Servs., 545 U.S. 967, 977-78 (2005); Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, 20 F.C.C.R. 14,853, 14,863 (2005), *petition for rev. den.*, Time Warner Telecom, Inc. v. F.C.C., 507 F.3d 205 (3rd Cir. 2007); United Power Line Council’s Petition for Declaratory Ruling Regarding the Classification of Broadband over Power Line Internet Access Service as an Information Service, *Memorandum Opinion and Order*, 21 F.C.C.R. 13,281 (2006); Appropriate Regulatory Treatment for Broadband Access to the Internet over Wireless Networks, *Declaratory Ruling*, 22 F.C.C.R. 5901 (2007).

⁴⁴ Title II of the Communications Act imposes a number of requirements on telecommunications service providers including the duty to operate without discrimination, to interconnect with other carriers and to provide service to all qualified consumers. *See* 47 U.S.C. §§ 201-276 (2012).

constitutes “reasonable discrimination” and whether a carrier offers “like services” on the same terms and conditions.⁴⁵ The FCC has devoted decades to these endeavors, regularly having to defend its interpretation of what burdens telecommunications service providers must undertake consistent with their common carrier status.⁴⁶

⁴⁵ “It shall be the duty of every common carrier engaged in interstate or foreign communication by wire or radio to furnish such communication service upon reasonable request therefor; and, in accordance with the orders of the Commission, in cases where the Commission, after opportunity for hearing, finds such action necessary or desirable in the public interest, to establish physical connections with other carriers, to establish through routes and charges applicable thereto and the divisions of such charges, and to establish and provide facilities and regulations for operating such through routes. “All charges, practices, classifications, and regulations for and in connection with such communication service, shall be just and reasonable, and any such charge, practice, classification, or regulation that is unjust or unreasonable is declared to be unlawful . . .” 47 U.S.C. § 201(a)-(b) (2013); “It shall be unlawful for any common carrier to make any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services for or in connection with like communication service, directly or indirectly, by any means or device, or to make or give any undue or unreasonable preference or advantage to any particular person, class of persons, or locality, or to subject any particular person, class of persons, or locality to any undue or unreasonable prejudice or disadvantage.” 47 U.S.C. § 202(a).

47 U.S.C. § 252(c)(3) requires all telecommunications service providers to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and section 252 of this title. An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service.”

⁴⁶ For example, the FCC undertook several regulatory initiatives to promote competition for local telecommunications services consistent with an explicit mandate contained in the Telecommunications Act of 1996. 47 U.S.C. § 251(c)(3) (2013). The Commission first received generally supportive appellate review of initiatives, but over time these intrusive and burdensome requirements, such as compulsory unbundling of service elements and below market pricing of access, failed to achieve sustainable competition even as they created disincentives for investment in infrastructure upgrades by incumbent carriers. *See* Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order, 11 F.C.C.R. 15,499 (1996), *aff’d in part, rev’d in part*, AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366 (1999); Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15

Regardless whether the FCC has direct statutory authority under Title II, or under Section 706 of the Telecommunications Act of 1996,⁴⁷ the Commission cannot prohibit rates, terms, conditions, tiers, features, carrier practices and service options made available to all “similarly

F.C.C.R. 3696 (1999), *rev'd and remanded*, United States Telecom Ass'n v. FCC, 290 F.3d 415 (D.C. Cir. 2002); Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, 18 F.C.C.R. 16,978, 16,983 (Aug. 21, 2003), *vacated and remanded in part, aff'd in part*, U.S. Telecomm. Ass'n v. FCC, 359 F.3d 554 (D.C. Cir. 2004); Unbundled Access to Network Elements, 20 F.C.C.R. 2533, 2534 (Feb. 4, 2005) (order on remand).

“It was both the intent of Congress and the target of intense and sustained FCC efforts to open up the incumbent local exchange carriers' (ILECs) local access lines to competitive local exchange carriers (CLECs) who could then compete against the ILECs for ‘last mile’ services without having to build their own access lines. Seldom have the forces of public policy in telecommunications been as powerfully aligned as they were on the issue of local-loop unbundling. And yet, the effort was a failure—the evidence for which is the demise of the CLECs. The reasons for this failure are clear: (i) the interface between the regulated monopoly owning the local-access line and the CLECs who wished to use it was highly complex; and (ii) the ILECs not only owned the local loops, they also competed in the retail market for access services with the very CLECs who had to use their facilities. The result was that ILECs had every incentive to make life miserable for the CLECs in any way they could, and the complexity of the interface gave them plenty of opportunity.” Gerald R. Faulhaber, *Will Access Regulation Work?*, 61 FED. COMM. L.J. 37, 40-41 (2008).

⁴⁷ 1996, Pub. L. No. 104-104, § 706, 110 Stat. 56, 153 (1996) (1996 Act), as amended in relevant part by the Broadband Data Improvement Act (BDIA), Pub. L. No. 110-385, 122 Stat. 4096 (2008), *codified* in Title 47, Chapter 12 of the United States Code. See 47 U.S.C. § 1301 *et seq.* Section 706 is reproduced in the notes to Section 157 of the Communications Act of 1934. 47 U.S.C. § 157 notes. Section 706(a) provides: “The Commission and each State commission with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment. Section 706(b) requires the Commission to conduct a regular inquiry “concerning the availability of advanced telecommunications capability.” *Id.* § 1302(b). It further provides that should the Commission find that “advanced telecommunications capability is [not] being deployed to all Americans in a reasonable and timely fashion,” it “shall take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market.” *Id.* The statute defines “advanced telecommunications capability” to include “broadband telecommunications capability.” *Id.* § 1302(d)(1).

situated” carriers and consumers.⁴⁸ Discrimination regularly satisfies the reasonableness criterion if end users, or other carriers opt for a service, even on specialized terms and conditions. Discrimination may become unreasonable if the provisioning carrier itself makes the determination whether to apply terms and conditions selectively and arbitrarily. On the issue of Internet access, quality of service discrimination created by proxy server installations would pass muster, because the venture providing this option typically offers it on a non-exclusive basis to anyone on commercially negotiated terms.

However, the certainty that reasonable discrimination can and should occur, does not eliminate the possibility that ISPs unilaterally may opt to engage in unreasonable and unlawful discrimination. Because of the integrated nature of end-to-end routing, the FCC would have a difficult time distinguishing between degradation deliberately triggered by artificially created congestion and other unreasonable practices, or the product of changed conditions that have resulted in insufficient bandwidth, switching capacity and interconnection ports available to

⁴⁸ “Although the Act does not expressly require general offerings, the Act does require the carriers to establish charges that do not result in ‘unreasonable’ discrimination among customers of ‘like’ telecommunications services. This obligation is normally interpreted as requiring that carrier offerings be generally available to all similarly situated customers.” Local Exchange Carriers’ Individualized Case Basis DS3 Service Offerings, GTE Telephone Operating Cos., Revision to Tariff F.C.C. No. 1, CC Docket Nos. 88-136, 89-305, Mem. Op. and Order, 4 F.C.C.R. 8634, 8642 (1989) *citing* Sea Land Services, Inc. v. ICC, 738 F.2d 1311, 1317 (D.C.Cir.1984); AT&T Communications, 4 F.C.C.R.4932, 4938 (1989) (Tariff 12 Order), *recon. denied*, 4 F.C.C.R. 7928 (1989). “Under Section 202(a) of the Communications Act and Commission orders, AT&T may not unreasonably discriminate or restrict resale with regard to its tariffed interstate service offerings. Moreover, AT&T’s Tariff 15 expressly provides that its competitive pricing plans, including CPP4, ‘are designed to respond to competitive circumstances affecting specific Customers and ... will also be available to all similarly situated Customers.’ . . . The requirement that AT&T make its CPP4 23% discount offering available to all ‘similarly situated’ customers is mandated, not only by that tariff provision, but also by Sections 201(b), 202(a) and 203(c) of the Act and, as ANI correctly notes, by the competitive necessity doctrine.” Thomas D. Wyatt, Chief, Formal Complaints and Investigations Branch, Common Carrier Bureau, Federal Communications Commission, DA 93-771, Letter 8 F.C.C.R. 4384 (1993).

handle specific content sources, or types of content. Should the FCC have any basis to get involved, its first function would be to conduct a forensic examination of the cause of congestion, or any other type of service interruption.⁴⁹ But even before a threshold decision whether and how the FCC should get involved lies the issue of what outcomes can predictably occur if the carriers and their clients by themselves work diligently to resolve disputes.

III. Broadcaster-MVPD Retransmission Consent Negotiations

Network neutrality opponents suggest that commercially driven negotiations between and among ISPs and content providers offer a more timely, efficient and customizable solution in lieu of FCC intervention. This model constitutes the predominant way Internet carriers agree to handle the traffic generated by other carriers. With rare exception,⁵⁰ the Internet cloud has

⁴⁹ The FCC may find it difficult to determine a single cause for temporary or chronic congestion and service degradation. For example, in early 2014 Netflix subscribers experienced a deterioration in service that the company attributed to efforts by retail ISPs to demand surcharge payments in light of increased traffic volume. Retail ISPs, such as Comcast, responded that they had undertaken no strategy to cause slower delivery speeds for Netflix traffic. ISPs claimed Netflix triggered congestion by releasing all episodes of blockbuster content instead of the conventional release of single episodes per week. See Drew Fitzgerald and Shalini Ramachandran, *Netflix-Traffic Feud Leads to Video Slowdown*, THE WALL STREET JOURNAL (Feb. 18, 2014); available at: <http://online.wsj.com/news/articles/SB10001424052702304899704579391223249896550>; “The hit political drama series of Netflix kept about 60,000 subscribers glued onto their screens on Valentine’s Day to watch the whole 13-hour production. However, the shifting behavior of consumers to watch videos on demand over the Internet is causing some clogged pipes on the information highway.” Randell Suba, *Netflix-Verizon standoff: Only net neutrality can now stop video slowdown*, TECH TIMES (Feb. 23, 2014); available at: <http://www.techtimes.com/articles/3670/20140223/netflix-verizon-standoff-only-net-neutrality-can-now-stop-video-slowdown.htm>. See also, Dan Rayburn, *Here’s How The Comcast & Netflix Deal Is Structured, With Data & Numbers*, STREAMING MEDIABLOG.COM (Feb. 27, 2014); available at: <http://blog.streamingmedia.com/2014/02/heres-comcast-netflix-deal-structured-numbers.html>.

⁵⁰ In 2008, Sprint and Cogent “de-peered” their networks, causing temporary service disruptions between their customers. See Om Malik, *Cogent, Sprint Disconnect Networks, May Cause Web Slowdown*, GigaOM (Oct. 30, 2008), available at: <http://gigaom.com/2008/10/30/cogent-sprint-un-peer-may-cause-web-slowdown>.

maintained widespread, redundant, competitive and efficient traffic routing upstream from retail ISPs using peering and transit agreements, as well as specialized arrangements provided by ventures such as Akamai. Network neutrality advocates concentrate on the first and last mile of traffic provided by retail ISPs, because this segment in the Internet ecosystem may lack all of the characteristics supporting fair and timely commercial arrangements. Retail ISPs use the same commercial negotiation models as their upstream counterparts, but may have the opportunity to exploit superior negotiating leverage in light of their status as the sole carrier providing access from and to the Internet cloud for a significant percentage of end users.

The question whether fair commercial negotiations can occur between parties may arise, but the FCC would be hard pressed to generate lawful criteria for assessing what constitutes commercial reasonableness particularly when buyer and seller reach closure on terms. One can dismiss as buyer's remorse claims of unfair or coercive treatment nevertheless accepted by an ISP or content provider. However, consumers may suffer if a party lacks good faith in negotiations, knowing that stalling can bolster negotiating leverage and result in better terms at a later date. Bear in mind that for streaming downloads of video content, consumers have a very low pain threshold for degradation in picture quality. A retail ISPs might attempt to extract more generous terms simply by refraining from making a conscientious effort to abate real congestion, or worst yet by taking steps designed to degrade bitstreams originating from the carrier, or a content source with which the ISP is negotiating.

A model exists for assessing the FCC's role in promoting timely and good faith negotiations without direct intervention and interference with the commercial negotiation process and the substantive outcome. The Commission has a limited role specified by law in its

oversight of negotiations between television broadcasters and MVPDs,⁵¹ such as cable television and Direct Broadcast Satellite operators, for the retransmission of broadcast television channels. The FCC can lawfully assess whether parties have negotiated in good faith, but the Commission cannot specify terms, mandate arbitration, or determine whether a negotiated settlement satisfies a commercially reasonableness standard.⁵² Additionally the FCC cannot order the parties to maintain the status quo in terms of carriage rights and compensation terms after a contract renewal deadline.⁵³

The broadcaster-MVPD retransmission model offers both similarities and differences when compared to ISP interconnection and compensation negotiations. In both categories the parties engage in a mutually beneficial transaction that reaches closure in the vast majority of instances before interconnection and carriage must stop. However the emphasis on retransmission consent lies in payment for access to content, with the MVPD absorbing the cost of last mile delivery, while the ISP negotiations cover the cost of carriage with no compensation for the value of the content carried.

Both ISPs and MVPDs must confront industry and regulatory conditions that trigger deviations from a fully functioning and completely unfettered marketplace. Each group must deal with specific counterparts in an “arranged marriage” of sorts. ISPs have to negotiate with specific retail ISPs that provide the only last mile link for terminating traffic to end users. In the

⁵¹ “As defined by statute, an MVPD is an entity that makes available for purchase multiple channels of video programming. Thus, the MVPD group includes cable operators, DBS operators, and telephone companies that offer multiple channels of video programming.” Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Fifteenth Report, 28 F.C.C.R. 10496, 10503 (2013).

⁵² *See supra*, n.6.

⁵³ *See supra* n.7.

United States most retail broadband subscribers choose between broadband options provided by incumbent cable television and telephone companies. Satellite broadband providers offer comparatively slower bit transmission speeds, have lower caps on allotted downloads per month, charge higher rates and require payments for necessary receiving equipment. Additionally, higher latency, caused by the distance to and from satellites, can disrupt some uses.⁵⁴ The newest generation of terrestrial wireless service provides a broadband option, albeit one with much smaller downloading allotments making the per megabyte cost of service significantly higher than wireline options.⁵⁵ Most consumers subscribe to one carrier that provides an exclusive link between content providers and the ISP's subscribers.

A. Limited Structural Regulation of Retransmission Negotiations

The existence of MVPD market power and the importance of broadcasters' local service prompted Congress in 1992 to impose a mandatory, "must carry" right of carriage for broadcasters, or the option to secure compensation from MVPDs.⁵⁶ MVPD market share has declined with the onset of new facilities-based competition and the option of using the Internet to deliver video programming,⁵⁷ but the FCC's retransmission rules have not markedly changed.

⁵⁴ See, e.g., Wild Blue, Deals and Pricing; available at: <http://www.wildblue.com/options/availability-results?availabilityZip=16802&availabilitySubmit=submit>.

⁵⁵ See, e.g., Verizon Wireless, The More Everything Plan, available at: <http://www.verizonwireless.com/wcms/consumer/shop/shop-data-plans/more-everything.html>.

⁵⁶ Cable Television Consumer Protection and Competition Act of 1992, P.L. 102-385, 106 Stat. 1460 (1992).

⁵⁷ "The number of Americans who pay for TV through cable, satellite or fiber services fell by more than a quarter of a million in 2013, the first full-year decline, according to research firm SNL Kagan. If the slide continues in the coming years, that means 2012 was the industry's high point." Edmund Lee, *TV Subscriptions Fall for First Time as Viewers Cut the Cord*,

Broadcasters have substantially increased retransmission compensation demands now that the balance of power in negotiations has shifted in their favor. In the case of stations owned and operated by broadcast networks, MVPDs have agreed to carry several channels affiliated, or owned by the broadcast network regardless of their ratings and attractiveness to consumers.

The FCC's primary statutory authority to oversee retransmission consent arrangements lies in its promotion of good faith negotiations, even though the statutory language contains rather expansive language authorizing the FCC "to govern the exercise by television broadcast stations of the right to grant retransmission consent."⁵⁸ This authority accords the Commission significant flexibility so long as it can characterize an impediment to closure as raising questions about whether a party has acted in good faith.⁵⁹ The FCC has created two tests for its evaluation: 1) an objective test identifying specific violations of the good faith standard; and 2) a subjective test considering the totality of circumstances.⁶⁰

BLOOMBERG NEWS (March 19, 2014); available at: <http://www.bloomberg.com/news/2014-03-19/u-s-pay-tv-subscriptions-fall-for-first-time-as-streaming-gains.html>.

⁵⁸ Communications Act of 1934, as amended, 47 U.S.C. §325(b)(3)(A)(2013).

⁵⁹ *Id.* 47 U.S.C. §325(b)(3)(C)(ii)(2013)(imposing a reciprocal duty to negotiate in good faith by broadcasters and MVPDs).

⁶⁰ Implementation of the Satellite Home Viewer Improvement Act of 1999, Retransmission Consent Issues: Good Faith Negotiation and Exclusivity, First Report and Order, 15 F.C.C.R. 5445 (2000). The objective test criteria are specified at 47 C.F.R. § 76.65(b)(1)(2013): "The following actions or practices violate a broadcast television station's or multichannel video programming distributor's (the 'Negotiating Entity') duty to negotiate retransmission consent agreements in good faith: (i) Refusal by a Negotiating Entity to negotiate retransmission consent; (ii) Refusal by a Negotiating Entity to designate a representative with authority to make binding representations on retransmission consent; (iii) Refusal by a Negotiating Entity to meet and negotiate retransmission consent at reasonable times and locations, or acting in a manner that unreasonably delays retransmission consent negotiations; (iv) Refusal by a Negotiating Entity to put forth more than a single, unilateral proposal; (v) Failure of a Negotiating Entity to respond to a retransmission consent proposal of the other party, including the reasons for the rejection of any such proposal; (vi) Execution by a Negotiating Entity of an agreement with any party, a term

In both retransmission consent and ISP interconnection negotiations, the balance of power may skew to one group of negotiators based on their superior bargaining leverage. Broadcasters exclusively offer “must see” television content and retail ISPs control the last mile content distribution link exclusively relied upon by a large percentage of consumers. Broadcasters typically extract concessions from MVPDs in the form of higher retransmission compensation, because a significant percentage of MVPD subscribers will not tolerate the loss of particularly compelling content such as regular season professional football and other live programming. Additionally FCC’s rules force MVPDs to negotiate with a specific local broadcaster, because currently in force rules prohibit MVPDs from securing duplicative content from another source. Such programming could come from another broadcaster operating outside the local market, having the same broadcast network affiliation, offering the same syndicated programming such as *Jeopardy* and *Wheel of Fortune*, or transmitting the same sporting event.⁶¹ The substantial increase in retransmission consent revenues accrued by broadcasters may

or condition of which, requires that such Negotiating Entity not enter into a retransmission consent agreement with any other television broadcast station or multichannel video programming distributor; and (vii) Refusal by a Negotiating Entity to execute a written retransmission consent agreement that sets forth the full understanding of the television broadcast station and the multichannel video programming distributor.” The objective test criterion is specified at 47 C.F.R. § 76.65(b)(2)(2013): “In addition to the standards set forth in § 76.65(b)(1), a Negotiating Entity may demonstrate, based on the totality of the circumstances of a particular retransmission consent negotiation, that a television broadcast station or multichannel video programming distributor breached its duty to negotiate in good faith as set forth in § 76.65(a).”

⁶¹ Network Non-duplication Protection, Syndicated Exclusivity and Sports Blackout, 47 C.F.R. Part 76, Subpart F, §§76.92-76.130 (2013).

evidence superior bargaining leverage. MVPDs payments to broadcasters increased from \$28 million in 2005 to \$2.4 billion in 2012, a nearly 8,600 percent increase in seven years.⁶²

B. New Limitations on the Structure of Retransmission Consent Negotiations

Notwithstanding its limited jurisdiction over retransmission consent negotiations, the FCC has interpreted good faith as limiting the number of broadcasters that can collectively negotiate with an MVPD. In response to substantial increases in retransmission consent compensation flowing from MVPDs to television broadcasters, the FCC has created new rules that curb the bargaining power of the broadcasters with the largest market share.⁶³

The Commission prohibits a television broadcast station, ranked among the top four stations as measured by audience share, from negotiating retransmission consent jointly with another top four station if the stations are not commonly owned and serve the same geographic market. Joint negotiation by these stations probably has contributed to higher retransmission consent fees, because it reduces competition between the stations that might occur if each station negotiated separately with an MVPD. The FCC also noted that the threat of losing programming from two or more top four stations at the same time creates a significant disincentive for MVPDs to reject broadcasters' financial demands. To target collusive behavior effectively, the FCC provides a definition of what constitutes a joint negotiation.

IV. The Prospect for Structural *and* Substantive Regulation of ISP Interconnections

ISPs providing downstream delivery of content, particularly bandwidth intensive video, appear to have similarly advantageous negotiating leverage. In particular retail ISPs operate as

⁶² Chairman Tom Wheeler, Protecting Television Consumers by Protecting Competition, FCC Blog (March 6, 2014); available at: <http://www.fcc.gov/blog/protecting-television-consumers-protecting-competition>.

⁶³ 2014 Revised Retransmission Consent Rules, *supra* n.9.

terminating monopolies or gateways⁶⁴ by providing the only link between content providers and a large percentage of end users. While retail broadband subscribers do have service options, they typically rely on only one carrier for all delivery services and do not appear quick to change carriers.⁶⁵ The agreements by Netflix and Level 3, in its capacity as a CDN, to pay additional compensation to retail ISPs, such as Comcast and Verizon, for improved last mile delivery provide support for the conclusion that ISPs can extract higher rents for prioritizing service to provide greater assurance that congestion will not degrade service.

Unlike retransmission consent negotiations, ISP interconnection and compensation agreements do not clearly fall within the ambit of FCC oversight. Having no direct statutory

⁶⁴ “The Commission also convincingly detailed how broadband providers’ position in the market gives them the economic power to restrict edge-provider traffic and charge for the services they furnish edge providers. Because all end users generally access the Internet through a single broadband provider, that provider functions as a ‘terminating monopolist,’ [citing 2010 Open Access Order, 25 F.C.C.R. at 17919] with power to act as a ‘gatekeeper’ with respect to edge providers that might seek to reach its end-user subscribers, [citing 2010 Open Access Order at 17919]. As the Commission reasonably explained, this ability to act as a “gatekeeper” distinguishes broadband providers from other participants in the Internet marketplace—including prominent and potentially powerful edge providers such as Google and Apple . . .” *Verizon v. FCC*, 740 F.3d 623, 646 (D.C. Cir. 2014).

⁶⁵ “As described by numerous commenters, and detailed more thoroughly in a Commission report compiling the results of an extensive consumer survey, the costs of switching include: ‘early termination fees; the inconvenience of ordering, installation, and set-up, and associated deposits or fees; possible difficulty returning the earlier broadband provider’s equipment and the cost of replacing incompatible customer-owned equipment; the risk of temporarily losing service; the risk of problems learning how to use the new service; and the possible loss of a provider-specific email address or website.’ [citing 2010 Open Internet Order, 25 F.C.C.R. at 17924–25 ¶ 34 and , Federal Communications Commission, *Broadband Decisions: What Drives Consumers to Switch—Or Stick With—Their Broadband Internet Provider* (FCC Working Paper, Dec. 2010), available at: https://apps.fcc.gov/edocs_public/attachmatch/DOC-303264A1.pdf. Moreover, the Commission emphasized, many end users may have no option to switch, or at least face very limited options: “[a]s of December 2009, nearly 70 percent of households lived in census tracts where only one or two wireline or fixed wireless firms provided” broadband service. *Id.* at 17923 ¶ 32. As the Commission concluded, any market power that such broadband providers might have with respect to end users would only increase their power with respect to edge providers. *Id.* *Verizon v. FCC*, 740 F.3d at 647.

authority for clear and comprehensive regulation of information services, the FCC has attempted to assert ancillary authority using Title I of the Communications Act.⁶⁶ On two occasions the D.C. Circuit Court of Appeals rejected the FCC's rationale as unlawfully imposing common carrier regulation.⁶⁷ However the court did recognize that Section 706 of the Communications Act provides the FCC with authority to assess the market penetration of advanced telecommunications services, including broadband, and to take steps to promote more widespread access if the Commission identifies the need. This limited mandate allows the FCC

⁶⁶ The FCC relies on a claim of ancillary jurisdiction when the Commission lacks explicit statutory authority. The FCC successfully invoked ancillary jurisdiction to regulate cable television even before the Commission received a statutory mandate to do so. "The FCC needed a hook to assert jurisdiction over cable. To reach that goal, it used a two-step process. First, the Commission found that cable was within its primary statutory grant of authority under section 152(a) of the [Communications] Act, which allows the FCC to regulate 'all interstate and foreign communication by wire or radio.' Second, the FCC invoked section 303(r) of the Act, which allows the Commission to issue 'such rules and regulations and prescribe such restrictions and conditions, not inconsistent with law,' as 'public convenience, interest, or necessity requires.' The FCC also referenced section 154(i), which provides that '[t]he Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with [the Communications Act], as may be necessary in the execution of its functions.' Kevin Werbach, *Off the Hook*, 95 CORNELL L. REV. 535, 572 (Mar. 2010) (citations omitted); James B. Speta, *The Shaky Foundations of the Regulated Internet*, 8 J. TELECOMM. & HIGH TECH. L. 101 (Winter 2010); John Blevins, *Jurisdiction as Competition Promotion: A Unified Theory of the FCC's Ancillary Jurisdiction*, 36 FLA. ST. U. L. REV. 585 (Summer 2009); Andrew Gioia, *FCC Jurisdiction Over ISPs in Protocol-Specific Bandwidth Throttling*, 15 Mich. Telecomm. & Tech. L. Rev. 517 (Spring 2009).

On several occasions, the Supreme Court has affirmed the FCC's claim of ancillary jurisdiction. *United States v. Sw. Cable Co.*, 392 U.S. 157 (1968); *FCC v. United States v. Midwest Video Corp.* (Midwest Video I), 406 U.S. 649 (1972). *See also* *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, (1984). The Supreme Court supports deferral to the expertise of a regulating agency "if the intent of Congress is clear." 467 U.S. at 842-43. If "Congress has not directly addressed the precise question at issue," and the agency has acted pursuant to an express or implied delegation of authority, the agency's statutory interpretation is entitled to deference, as long as it is reasonable. *Id.* at 843-44. *See also* *United States v. Mead Corp.*, 533 U.S. 218, 226-27 (2001).

⁶⁷ *Comcast Corp. v. F.C.C.*, 600 F.3d 642 (D.C. Cir. 2010); *Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014).

to fashion rules that promote timely and widespread broadband access, provided the Commission does not impose common carrier responsibilities.

Using Section 706 as its primary basis for jurisdiction, the FCC proposes to oversee ISP interconnection and compensation arrangements to ensure that deviations from conventional nondiscriminatory best efforts routing satisfy a commercial reasonableness standard.

Notwithstanding two court reversals, the FCC has launched another proceeding with an eye toward establishing lawful open Internet rules.⁶⁸ Opting to concentrate on language in *Verizon v. FCC*,⁶⁹ where the D.C. Circuit Court of Appeals recognized a limited range of permissible

⁶⁸ Protecting and Promoting the Open Internet, GN Docket No. 14-28, FCC 14-61, Notice of Proposed Rulemaking (rel. May 15, 2014); available at: <http://www.fcc.gov/document/protecting-and-promoting-open-internet-nprm> [hereinafter cited as 2014 Open Internet 2014 NPRM].

⁶⁹ *Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014).

regulatory oversight,⁷⁰ the FCC has created proposed rules⁷¹ that only the Democratic Commissioners⁷² consider necessary⁷³ and lawful.⁷⁴

The 2014 Open Internet NPRM proposes to apply much of the same definitions, policies, rules and complaint resolution procedures the FCC established in 2010.⁷⁵ The Commission seeks

⁷⁰ The FCC reads *Verizon* case upholding its reading that “sections 706(a) and (b) of the Telecommunications Act grant the Commission affirmative authority to encourage and accelerate the deployment of broadband capability to all Americans through, among other things, measures that promote competition in the local telecommunications market or remove barriers to infrastructure investment. The court further held that the Commission could utilize that section 706 authority to regulate broadband Internet access service. It concluded that the Commission had adequately justified the adoption of open Internet rules by finding that such rules would preserve and facilitate the ‘virtuous circle’ of innovation, demand for Internet services, and deployment of broadband infrastructure and that, absent such rules, broadband providers would have the incentive and ability to inhibit that deployment.” 2014 Open Internet NPRM at ¶23.

⁷¹ An FCC Notice of Proposed Rulemaking typically offers specific regulatory outcomes that the Commission tentatively concludes are lawful and in the public interest. The Administrative Procedures Act, 5 U.S.C. §§ 551-559 (2013) requires the FCC to invite comments and to generate a complete evidentiary record to support its tentative conclusions. The proposed rules become enforceable rules only after the FCC issues an Order that finalizes, or revises the proposed rules.

⁷² The FCC Commissioners split the vote to approve the 2014 Open Internet NPRM on party lines. The two Republican Commissioners issued dissents that strongly assert the FCC continues to lack statutory authority to impose open Internet access rules and that the Commission should not reclassify Internet access as a telecommunications service to acquire Title II statutory authority.

⁷³ Currently “there are no legally enforceable rules by which the Commission can stop broadband providers from limiting Internet openness.” 2014 Open Internet NPRM at ¶3. “It is in the absence of these protections for the open Internet that the Commission must act to ensure that new legally enforceable rules are put in place. That is a gap that must be closed as quickly as possible.” *Id.* at ¶9.

⁷⁴ “Per the blueprint [for lawful regulatory oversight] offered by the D.C. Circuit in its decision in *Verizon v. FCC*, the Commission proposes to rely on section 706 of the Telecommunications Act of 1996.” *Id.* at ¶4. The 2014 Open Internet NPRM also proposes to “seriously consider the use of Title II of the Communications Act as the basis for legal authority.” *Id.*

to create more extensive ISP reporting requirements that it believes the *Verizon* case endorsed as lawful requirements based on the FCC's statutory authority to require that ISPs operate with transparency.⁷⁶

The FCC also proposes to re-establish the rule prohibiting ISPs from blocking access to lawful content that the D.C. Circuit Court of Appeals rejected as impermissibly imposing common carrier duties on information service providers.⁷⁷ The Commission wants to achieve the goal of prohibiting blocking, coupled with an implicit requirement that ISPs not engage in any discriminatory practices at least for a base level of performance for which all subscribers and upstream sources of content have a right to expect. The Commission tentatively concluded “that the revived no-blocking rule should be interpreted as requiring broadband providers to furnish edge providers with a minimum level of access to their end-user subscribers.”⁷⁸ The

⁷⁵ “[W]e generally propose to retain the definitions and scope of the 2010 rules. . . . [W]e tentatively conclude that the Commission should adopt the text of the no-blocking rule from the Open Internet Order with a revised rationale, in order to ensure that all end users and edge providers can enjoy the use of robust, fast and dynamic Internet access.” *Id.* at ¶10. “We tentatively conclude that the same three means by which the Commission focused on potential open Internet violations after the adoption of the *Open Internet Order*, namely self-initiated investigation, informal complaints, and formal complaints, should be used as well to enforce any new open Internet rules.” *Id.* at ¶172.

⁷⁶ “[W]e tentatively conclude that the Commission should enhance the transparency rule that was upheld by the D.C. Circuit so that the public and the Commission have the benefit of sunlight on broadband provider actions and to ensure that consumers and edge providers—indeed, the Internet community at large—have the information they need to understand the services they are receiving and to monitor practices that could undermine the open Internet.” *Id.*

⁷⁷ “[W]e tentatively conclude that the Commission should adopt the text of the no-blocking rule from the Open Internet Order with a revised rationale, in order to ensure that all end users and edge providers can enjoy the use of robust, fast and dynamic Internet access. *Id.*

⁷⁸ *Id.* at ¶97. The FCC also proposes to subject wireless broadband ISPs to a less restrictive anti-blocking policy consistent with its 2010 Order that prohibited blocking lawful web content as well as applications that compete with the mobile broadband providers’ own voice or video telephony services, subject to reasonable network management. *See Id.* at ¶105.

Commission attempts to show that a rule prohibiting blocking for service required to meet a threshold level of performance complies with the objectives contained in Section 706 of the Telecommunications Act of 1996⁷⁹ and also by Title II of the Communications Act, if the Commission opts to reclassify Internet access as a telecommunications service.⁸⁰

For service exceeding the baseline threshold, which the Commission tentatively analogizes to conventional “best efforts” traffic routing,⁸¹ the FCC evidences flexibility and sought comment whether it should allow ISPs to categorize traffic streams so that some traffic can qualify for prioritization, provided ISPs do not degrade the performance of standard traffic delivery.⁸² Specifically the FCC proposed to allow:

⁷⁹ 47 U.S.C. § 1301 *et seq.*

⁸⁰ The 2014 Open Internet NPRM invites comments about whether the FCC should reclassify Internet access from the largely unregulated information service to the telecommunications service subject to Title II regulation that the Commission can calibrate by streamlining and forbearing from applying all common carrier requirements. “We seek comment on whether the Commission should rely on its authority under Title II of the Communications Act, including both (1) whether we should revisit the Commission’s classification of broadband Internet access service as an information service and (2) whether we should separately identify and classify as a telecommunications service a service that ‘broadband providers . . . furnish to edge providers.’ For either of these possibilities, we seek comment on whether and how the Commission should exercise its authority under section 10 (or section 332(c)(1) for mobile services) to forbear from specific obligations under the Act and Commission rules that would flow from the classification of a service as telecommunications service.” 2014 Open Internet NPRM at ¶148.

⁸¹ “One way to define a minimum level of access is as a requirement that broadband providers apply no less than a “best effort” standard to deliver traffic to end users. For any particular type of Internet traffic, best-effort delivery would represent the ‘typical’ level of service for that type of traffic—in effect, routing traffic according to the ‘traditional’ architecture of the Internet.” 2014 Open Internet NPRM at ¶102.

⁸² “[W]e propose to create a separate screen that requires broadband providers to adhere to an enforceable legal standard of commercially reasonable practices, asking how harm can best be identified and prohibited and whether certain practices, like paid prioritization, should be barred altogether.” *Id.*

broadband providers to engage in individualized practices, while prohibiting those broadband provider practices that threaten to harm Internet openness. Our proposed approach contains three essential elements: (1) an enforceable legal standard of conduct barring broadband provider practices that threaten to undermine Internet openness, providing certainty to network providers, end users, and edge providers alike, (2) clearly established factors that give additional guidance on the kind of conduct that is likely to violate the enforceable legal standard, and (3) encouragement of individualized negotiation and, if necessary, a mechanism to allow the Commission to evaluate challenged practices on a case-by-case basis, thereby providing flexibility in assessing whether a particular practice comports with the legal standard.⁸³

The prohibition on imposing common carrier requirements on ISPs, absent a reclassification of regulatory status, obligates the FCC to come up with language that imposes duties that fall below common carriage. The Commission proposed a nuanced approach:

It would prohibit as commercially unreasonable those broadband providers' practices that, based on the totality of the circumstances, threaten to harm Internet openness and all that it protects. At the same time, it could permit broadband providers to serve customers and carry traffic on an individually negotiated basis, "without having to hold themselves out to serve all comers indiscriminately on the same or standardized terms," so long as such conduct is commercially reasonable.⁸⁴

The FCC's approach requires great finesse. On one hand, it cannot impose clear common carrier duties on ISPs, unless it reclassifies them as telecommunications service providers, a tactic guaranteed to trigger substantial opposition and litigation. On the other hand, the Commission has to create rules that achieve the desired outcome of allowing ISPs to engage in commercial negotiations that will provide specialized, arguably "better than best efforts" routing options for single ventures without so balkanizing and dichotomizing the Internet into fast lanes

⁸³ *Id.* at ¶111.

⁸⁴ 2014 Open Internet NPRM at ¶116, *citing* Verizon v. FCC, 740 F.3d at 652.

available to ventures with deep pockets and slow lanes available to ventures, including most startups, lacking the financial resources to pay surcharges.

The FCC believes it can satisfy the prohibition on common carriage while also preventing unreasonable blockage and discrimination by applying case precedent where the D.C. Circuit Court of Appeals affirmed the imposition of private carrier interconnection requirements where commercially and technically feasible. In *Cellco Partnership v. FCC*,⁸⁵ the same court, which that twice reversed the FCC on open Internet rules, affirmed the Commission's rules requiring cellphone companies to negotiate commercial terms and conditions for data roaming.⁸⁶ The court agreed that even for private carriers, such as wireless ISPs, the FCC can impose reasonable, non-common carrier duties to deal, based on commercially negotiated, non-uniform terms and conditions.

The FCC broadly justifies the need for regulatory intervention based on the incentive⁸⁷ and ability⁸⁸ of ISPs to limit Internet openness in ways that may enhance individual carrier

⁸⁵ 700 F.3d 534, 541 (D.C. Cir. 2012).

⁸⁶ Data roaming allows wireless consumers the ability to access the Internet in locations outside their local service area using the broadband services of a carrier with which the customer's carrier has an interconnection agreement.

⁸⁷ "In the Open Internet Order, [Preserving the Open Internet, GN Docket No. 09-191, WC Docket No. 07-52, Report and Order, 25 F.C.C.R. 17905 (2010) *aff'd in part, vacated and remanded in part sub nom.* Verizon v. FCC, 740 F.3d 623 (D.C. Cir. 2014)] the Commission found that providers of broadband Internet access service had multiple incentives to limit Internet openness. The Order concluded that the threat of broadband provider interference with Internet openness would be exacerbated by—but did not depend on—such providers possessing market power over potential subscribers in their choice of broadband provider. However, the Commission found that most residential customers have only one or two options for wireline broadband Internet access service, increasing the risk of market power, and found the future of mobile Internet access service as a competing substitute remained unclear." 2014 Open Internet NPRM at ¶42.

⁸⁸ "[I]ncreasingly sophisticated network management tools enable providers to identify and differentiate the treatment of traffic on their own broadband Internet access service networks.

profitability, but at the expense of full exploiting the Internet ecosystem to spur innovation, competition, free expression and infrastructure deployment.⁸⁹ The Commission reminds readers that the *Verizon* court did not question this conclusion. The “D.C. Circuit found that the Commission ‘adequately supported and explained’ that absent open Internet rules, ‘broadband providers represent a threat to Internet openness and could act in ways that would ultimately inhibit the speed and extent of future broadband deployment.’”⁹⁰

V. Lessons from the Retransmission Consent Rulemaking Process and Other Nonstructural Requirements

The FCC opted to prevent broadcasters from continuing to form negotiating blocs, because it had at least some empirical evidence of a real and chronic problem. The Commission wisely chose to implement a lawful strategy to provide consumers with possible financial relief. The Commission could readily determine that the retransmission consent process has evolved into an easy way for broadcasters to generate higher revenues through ever increasing

The D.C. Circuit agreed, finding “little dispute that broadband providers have the technological ability to distinguish between and discriminate against certain types of Internet traffic.” *Id.* at ¶51 *quoting* *Verizon v. FCC*, 740 F.3d at 646.

⁸⁹ The FCC noted that the D.C. Circuit Court of Appeals in *Verizon v. FCC*, “affirmed the Commission’s conclusions that vertically integrated broadband providers have incentives to interfere with competitive services and that broadband providers generally have incentives to accept fees from edge providers.” *Id.* at ¶43 *citing* *Verizon v. FCC*, 740 F.3d at 644-45.

⁹⁰ *Id.* at ¶39 *quoting* *Verizon v. FCC*, 740 F.3d at 645. “The D.C. Circuit found that the Commission’s assessment of broadband providers’ incentives and economic ability to threaten Internet openness was not just supported by the record but also grounded in ‘common sense and economic reality.’ *Id.* at ¶43 *quoting* *Verizon v. FCC*, 740 F.3d at 644.

retransmission consent fees and by securing MVPD paid carriage of additional, possibly less desirable nonbroadcast channels offered by television networks.⁹¹

The FCC imposed a structural limitation that fits within the scope of regulatory oversight accorded the Commission by Section 325 of the Communications Act. The Commission refrained from imposing more aggressive regulatory intervention such as the option of prescribing interim carriage requirements, or mandating binding dispute resolution. All FCC Commissioners voted in favor of the rule changes, an increasingly rare outcome.

Other structural safeguards in the MVPD marketplace offer guidance on how the FCC can provide rules that enhance the ISP negotiating process without affecting the substantive terms. For example, when a broadcaster opts for compensation-free, “must carry” by MVPDs, the broadcaster secures the right to retain the same channel number when inserted into the inventory of MVPD content.⁹² Having abandoned a claim for compensation, broadcasters should

⁹¹ “While the rules governing retransmission consent have remained the same over the past two decades, the video landscape has changed dramatically—and in ways that have undercut the rationale for those rules.

“The most obvious change in the industry has been the increased competition among video distributors seeking to carry local broadcast programming.” Matthew A. Brill and Matthew T. Murchison, *How the FCC Can Protect Consumers in the Battle Over Retransmission Consent*, Bloomberg BNA, BNA INSIGHTS (Sep. 3, 2013); available at: <http://www.bna.com/how-the-fcc-can-protect-consumers-in-the-battle-over-retransmission-consent/>.

⁹² “The Commission has clarified that ‘broadcast stations may assert their carriage and channel positioning rights at any time so long as they have not elected retransmission consent.’ With respect to the channel number on which stations asserting must carry rights are to be carried, Section 614 of the Act and Section 76.57 of the Commission’s rules provide commercial television stations with three statutory options. Pursuant to Section 76.57(a), a commercial broadcast station may elect to be carried on: (1) the channel number on which the station is broadcast over the air; (2) the channel number on which the station was carried on July 19, 1985; or, (3) the channel number on which the station was carried on January 1, 1992. The Act and the rules also provide that a broadcast station may be carried on any other channel number mutually agreed upon by the station and the cable operator. The Commission has clarified that these rules apply fully in the digital context.” Channel 20 TV Company (KCDO-TV, Sterling, Colorado)

not possibly lose additional revenues resulting from channel placement into comparatively less favorable “neighborhoods,” e.g., triple digit channels at the far edge of available content and far from other channels offering similar content.

The FCC also has addressed channel placement when imposing or incorporating conditions to a controversial merger. When the FCC approved Comcast’s acquisition of NBC-Universal, the Commission applied a condition requiring Comcast to retain programming “neighborhoods” containing networks offering similar content.⁹³ The Commission reasoned that without a procedure for requiring parity in channel placement, Comcast might opt to locate its owned or affiliated networks in favorable locations while relegating competitor networks to unfavorable, triple digit channels. The FCC has required Comcast to comply with this channel placement commitment by placing the unaffiliated Bloomberg Business network in close proximity to the channel assigned to the affiliated CNBC network.⁹⁴

v. Bresnan Communications, DA 10-377, Memorandum Opinion and Order, 25 F.C.C.R. 2219, 2220 (2010), *citing* Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Broadcast Signal Carriage Issues, MM Docket No. 92-259, Clarification Order, 8 F.C.C.R. 4142, 4144 (1993); 47 U.S.C. § 534(b)(6); 47 C.F.R. § 76.57(a); 47 C.F.R. § 76.57(f); and Carriage of Digital Television Broadcast Signals; Amendments to Part 76 of the Commission’s Rules, CS Docket No. 98-120, Declaratory Order, 23 F.C.C.R. 14254 (2008).

⁹³ Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licensees, MB Docket No. 10-56, Memorandum Opinion and Order, 26 F.C.C.R. 4238 (2011). The FCC requires Comcast to negotiate fairly with unaffiliated content providers for the carriage of their content. “In light of the significant additional programming Comcast will control--programming that may compete with third-party programming Comcast carries on its MVPD service--we require that Comcast not discriminate in video programming distribution on the basis of affiliation or non-affiliation with Comcast-NBCU.” *Id.* 26 F.C.C.R. at 4241.

⁹⁴ “[I]f Comcast ‘neighborhoods’ its news (including business news) channels, it must include all unaffiliated news (or business news) channels in that neighborhood.” Approval of Comcast Acquisition of NBC Universal, 26 F.C.C.R. at 4241. Within one year of its merger approval the FCC launched an investigation whether Comcast violated a condition by refusing to

On the other hand, the FCC overreaches if and when it makes substantive decisions about where and how an MVPD offers specific types of content. For example, the D.C. Circuit Court of Appeals reversed an FCC decision requiring Comcast to offer on the same programming tier similar type content without regard to whether company has an ownership interest in the network packaging the programming.⁹⁵ The FCC required Comcast to place the unaffiliated Tennis Channel on the same programming tier as the company offered its affiliated Golf Channel. The court evidenced little concern that Comcast might purposefully disadvantage a competitor of its own programming and instead based its decision rejecting parity in channel placement on the FCC's lack of statutory authority to make substantive channel placement decisions. The Tennis Channel might have generated better ratings and commensurately higher advertising revenues if Comcast had not placed the network on a more expensive and less viewed sports programming tier. However that possibility did not legally support the FCC's attempt to level the competitive playing field for the two types of programming, action that would usurp Comcast's commercial judgment.

The Commission's prudent and measured response to a problem in retransmission consent negotiations provides a proper model for how it should respond to calls for aggressive

assign Bloomberg Television a channel assignment in the same "community" of channels assigned to similar news and business news networks. *Bloomberg L.P., Complainant v. Comcast Cable Communications, LLC, Defendant*, MB Docket No. 11-104, DA 12-694, 27 F.C.C.R. 4891 (2012)(granting in part a Bloomberg's complaint that its 24-hour business news channel, Bloomberg Television, is an "independent news channel" covered by the "news neighborhooding" condition adopted in the conditional approval of Comcast's acquisition of NBC Universal).

⁹⁵ *Tennis Channel, Inc., Complainant v. Comcast Cable Communications, L.L.C., Defendant*, MB Docket No. 10-204, File No. CSR-8258-P, Memorandum Opinion and Order, 27 F.C.C.R. 8508 (2012), *pet. for stay den.* 27 F.C.C.R. 9274 (2012), *reversed* *Comcast Cable Comms. LLC v. FCC*, 717 F.3d 982 (D.C. Cir. 2013), *cert. den.*, 134 S.Ct. 1287 (2014).

and possibly intrusive regulatory oversight of ISP interconnection and compensation negotiations. The new retransmission consent rules respond to an identifiable and measurable problem: MVPD rate increases well in excess of a commonly used index of consumer prices with recent increases raising the per channel cost of service.⁹⁶ The rules fit within the scope of permissible regulatory action specified by law. FCC action did not impact the substantive aspects of negotiations, only their structure. By addressing procedure, the FCC possibly can impact the negotiating process in ways that serve the public interest without unfairly and unlawfully imposing substantive terms and conditions.

Like retransmission consent agreements, the terms and conditions of ISP interconnection arrangements have a direct impact on consumers both in terms of service rates and the sustainability of competition. The FCC assumes that consumers and the public interest will suffer in the absence of rules that constrain both the structure of interconnection negotiations and their substantive outcomes. When the Commission moves into the realm of substantive, commercial negotiations, it risks substituting its judgment on what is commercially reasonable for what two parties have negotiated at arm's length.

Negotiations for retransmission consent and retail ISP traffic delivery to end users both require cooperation by a venture for which no readily available alternative exists. Unless the FCC repeals the network and syndicated exclusivity rules, MVPDs must negotiate with a specific

⁹⁶ The FCC Commission reported that the average monthly price of expanded basic cable service increased overall by 5.1 percent in the year ending January 1, 2013, while the average price per channel increased by 2.1 percent. Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992, Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment, MM Docket No. 92-266, Report on Industry Prices, DA 14-672, ¶1. (rel. May 16, 2014); available at: <http://www.fcc.gov/document/report-average-rates-cable-programming-service-and-equipment-2>. The Consumer Price Index increased 1.6% during the same period. *Id.* at ¶3.

local broadcaster. Likewise a CDN or conventional ISP must negotiate with specific retail ISPs for access to subscribers solely relying on that carrier for last mile delivery of content. Whether by regulation, or market forces, these forced partnerships can confer superior negotiating leverage on one party: broadcasters with “must see” content and retail ISPs with the content termination link selected by a significant percentage of broadband consumers.

Ventures perceiving a negotiating advantage surely want to exploit it, but the justification of regulatory intervention requires both statutory authority and empirical evidence that consumers suffer. Sections 325 and 706 of the Communications Act provide a variable degree of certainty whether statutory authority exists. To apply either Section, the FCC has to compile an evidentiary record showing that consumer harm requires regulatory intervention. For retransmission consent negotiations, the Commission has erected a process to assess whether the parties have negotiated in good faith, using specific criteria and applying a macro-level assessment. The FCC can examine why the parties could not reach closure on commercial negotiations before a deadline triggered a “black out.”

The FCC also has a legal obligation to compile an evidentiary record in ISP interconnection disputes with the scope of inquiry including a forensic examination of what has prevented the parties from reaching closure before consumers suffer outages and other types of service degradation. In many instances the parties will dispute the causes for congestion and the manner in which it can be ameliorated. Without affecting the substantive terms contained in a new agreement, the FCC should impose light-handed structural safeguards that promote timely and transparent resolution of complaints presented to it by an aggrieved party.

The Commission can determine the causes for a dispute only if it has access to interconnection agreements and explanations from parties why an outage or congestion occurred

notwithstanding a previously acceptable and working arrangement. ISPs zealously shroud their interconnection arrangements for obvious and legitimate commercial reasons, but an in camera investigation by the FCC, with redacted public disclosure, can help answer essential questions about what circumstances have changed so that once satisfactory interconnection terms no longer work.

The FCC has lawful authority to ensure that consumers understand what services they are buying and what service commitments ISPs make even in the absence of regulated tariffs.⁹⁷ This includes the lawful authority to determine why an ISP could not achieve its service commitments for all traffic, certain types of traffic and specific upstream sources of traffic. If an ISP no longer can deliver bandwidth intensive video content at a sufficiently high speed to assure acceptable display on end user televisions, personal computers, smartphones and tablets, then the ISP has a duty to explain why. If the degradation in delivery results from changed circumstances, including a substantial increase in the amount of capacity seeking downstream delivery, then the terminating carrier has provided the FCC with an adequate explanation. The Commission has lawful authority to examine the procedural and nonsubstantive reasons why the parties have failed to reach a timely resolution to a dispute, but not to prescribe commercial terms and conditions, or to determine whether the parties have reached a fair settlement despite the lack of parity in negotiating leverage.

⁹⁷ See 47 C.F.R. §64.2401 Truth-in-Billing Requirements (2013); Truth-in-Billing Format, CC Docket No. 98-170, First Report and Order and Further Notice of Proposed Rulemaking, 14 F.C.C.R. 7492 (1999); Consumer Information and Disclosure, CG Docket No. 09-158, Truth-In-Billing Format, CC Docket No. 98-170, Notice of Inquiry, 24 F.C.C.R. 11380, 11399 (2009); Empowering Consumers to Prevent and Detect Billing for Unauthorized Charges (“Cramming”) Consumer Information and Disclosure, Truth-in-Billing and Billing Format, CG Docket Nos. 11-116, 09-158 and CC Docket No. 98-170, Report and Order and Further Notice of Proposed Rulemaking, 27 F.C.C.R. 4436, 27 F.C.C.R. 13989 (2012).

The inability to affect substantive terms in both retransmission and ISP carriage negotiations may prevent the FCC from facilitating dispute resolution before content becomes temporarily unavailable to consumers. However the lack of access by consumers may generate the kind of pushback and outrage that can force the parties to get serious. In light of widespread media coverage and consumers response to outages, parties opting for a delay or bad faith strategy may suffer in the court of public opinion. For example, Netflix appears to reduce the superior negotiation leverage of retail ISPs simply by compiling and disseminating a scorecard that shows near term bit transmission performance of various carriers.⁹⁸ Consumers of retail ISPs reported to have declining and inferior service may consider these possibly contestable statistics as solid proof that the retail ISP has caused congestion through neglect and the failure to make timely and necessary upgrades.⁹⁹ While consumers may not “vote with their dollars” in significant numbers by changing carriers, retail ISPs reported as derelict face a public relations and marketing dilemma possibly resolved by changing interconnection strategies. Law suits

⁹⁸ See Netflix, *USA ISP Speed Index Results Graph*, available at: <http://ispspeedindex.netflix.com/results/usa/graph>.

⁹⁹ In a few retransmission negotiations broadcast networks, such as Fox and CBS, have opted to block access to alternative sources of “must see” content by tracking the Internet Protocol address of consumers seeking content at a content aggregation site, such as Hulu, or the networks own web site. Brian Stelter, *Internet Is a Weapon in Cable Fight*, THE NEW YORK TIMES (Oct. 19, 2010); available at: http://www.nytimes.com/2010/10/20/business/media/20hulu.html?_r=0; Bill Carter, *After a Fee Dispute With Time Warner Cable, CBS Goes Dark for Three Million Viewers*, THE NEW YORK TIMES (Aug. 2, 2013); available at: <http://www.nytimes.com/2013/08/03/business/media/time-warner-cable-removes-cbs-in-3-big-markets.html>. This strategy may backfire because consumers will know the specific cause of the blockage. Rather than gain negotiating leverage, the broadcast network might come across as using unfair tactics by denying consumers access to content readily available to all other broadband subscribers located outside markets where a retransmission consent dispute is taking place.

alleging commercial defamation by a content provider probably would compound the ISP's problems.¹⁰⁰

It appears that ample options exist for most retransmission and ISP interconnection negotiations to reach closure without extensive delay and posturing. Ventures considering the advantages conferred by stalling and bad faith negotiations increasingly have to consider the downsides of such strategy including an extremely bad public image, particularly if they also want regulatory approval for commercial transactions such as a merger. If the FCC can use discipline and modesty to refrain from making substantive decisions affecting commercial transactions, it will find that its nonstructural and procedural requirements can work effectively.

¹⁰⁰ Marguerite Reardon, *Verizon threatens to sue Netflix over congestion claims*, CNET (June 5, 2014); available at: <http://www.cnet.com/news/verizon-threatens-netflix-with-lawsuit-over-congestion-accusations/>.